

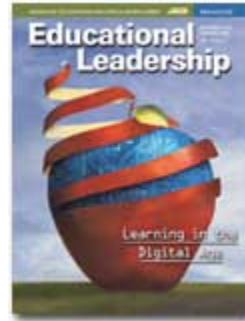
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The Educator's Guide to the Read/Write Web

Will Richardson

Tools like blogs, wikis, and podcasts help students find authentic audiences for their work.



Did you post to your blog today?" "Have you tried using a wiki for that?" "Furl anything this week?"

No, these aren't survey questions from the Tech Geek Dating Service.

They're questions centered around the new content creation and publication tools available for the Internet—tools that many teachers and students are using to enhance learning.

The Internet is no longer simply a place where digital learners consume information. It is now also a forum through which users can publish and broadcast their own writing. Weblogs, wikis, podcasts, and similar tools introduced over the last few years have ushered in the "Read/Write Web," a phenomenon that is changing the face of journalism, politics, business, and other areas of society. Classrooms are beginning to feel these effects as well, as thousands of teachers and students use the Web to publish their work, collaborate on projects, and engage in online conversations.

Cool Tools of the Read/Write Web

Let's look at the new technologies that support the Read/Write Web.

As Easy as Posting on a Blog

One key tool is Weblogs, or blogs, which enable anyone to create a personal or group Web site without needing to learn hypertext markup language. All it takes to share content with a worldwide audience is to log in, enter text into a box on the screen, and click on *publish*. Like traditional Web sites, blogs can incorporate graphics and multimedia. But unlike traditional sites, blogs allow online conversations among users; most blogs allow any visitor to post public comments about the site's contents.

Tens of millions of bloggers around the world, many of them high school students, regularly add their ideas and perspectives to the massive body of information that is the Web. Although many youth treat blogs as simple online diaries, some students and teachers use them as vehicles to draw out critical thinking, reading, and writing skills. Teachers are using blogs to build classroom resource portals and to foster online learning communities. Students create online, reflective, interactive portfolios of their work to share with worldwide audiences.

For example, at Hunterdon High School in Flemington, New Jersey, where I teach, students have used blogs to collaborate with authors of the books they are reading in literature classes; to contact professional mentors in journalism classes; and to communicate with high schoolers from Krakow, Poland, as part of a unit on the Holocaust.

Wikis: The Beauty of Collaboration

Wikis are an even more open and collaborative content creation tool. *Wiki* is the Hawaiian word for *quick*. A wiki is a Web site that anyone can edit at any time. The most visible example of the potential of wikis is Wikipedia.org, the online encyclopedia with more than 500,000 entries. Each entry is continually shaped by anonymous contributors who log on to the encyclopedia and add new or clarifying information as the need arises.

Wikipedia is not only an amazing information source but also an example of the power of the Read/Write Web. Every day, thousands of people with no physical connection to one another engage in the purposeful

work of negotiating and creating this accurate online resource by editing, deleting, or restoring its content. They do this with no expectation that their contributions will be acknowledged or compensated, understanding that the writing they contribute can be freely edited, modified, or copied by anyone else. There are no technological safeguards against a user putting bogus information into the site or vandalizing an entry; the community of people using the wiki keeps the information accurate by policing itself. If anyone enters erroneous information or vandalizes the site, another user usually repairs the damage. Hard as it is to believe, in the majority of cases the community maintains a high degree of accuracy and appropriateness. The extent and quality of contributions to Wikipedia are truly inspiring. Students and teachers in classes ranging from media studies to physics are collaboratively building their own wikis that feature lists of annotated resources and links relevant to the course curriculum that can be shared with future classes.

Feeds, Social Bookmarking, and Podcasting

Another new digital tool is Really Simple Syndication (RSS). Really Simple Syndication enables people to subscribe to various feeds of information—data that are continually streamed and collected into a file with the help of a tool called an aggregator. RSS aggregators check this information stream as regularly as every hour to see if there is anything new for RSS subscribers to read when they are ready; if there is, the aggregator copies and stores it. Just about all Weblog software automatically generates an RSS feed. When various feeds are collected by an aggregator, keeping up with 50 or even 100 different blogs becomes relatively easy. Any new content that appears on any of the targeted blogs is automatically collected and stored.

Hundreds of traditional media outlets like *The New York Times*, *Newsweek*, and *The Wall Street Journal* now offer RSS feeds for their content. Users can create feeds connected to specific search terms at sites like Yahoo! News, so that any new information about a topic is automatically collected in the aggregator. Teachers and students can use this new way of collecting information to broaden the scope of their reading and research. A student doing a project on global warming, for example, can create RSS feeds that will bring him or her the latest research on the topic almost as soon as it is published.

But collecting information is only half of the process. Certain new tools also enable users to archive and share relevant information. With social bookmarking sites like Furl.net and del.icio.us, users can not only save a site address, as traditional bookmarking does, but also save a copy of the Web site itself in a searchable folder. What makes this tool social is the ability to subscribe, without special permission, to RSS feeds of what another user is saving. Social bookmarking enables teachers to leverage the collaborative efforts of like-minded professionals to mine information on the Internet.

Another way to share information on the Web is *podcasting*, which can best be described as creating amateur home radio programs and widely distributing them on the Web. Thousands of podcasters are creating and broadcasting content that people can listen to whenever their schedule allows, not just at the hour it is broadcast. Students across the United States are podcasting audio tours of local museums and points of interest, weekly news programs about their classrooms, oral histories and interviews, and more. New and easier ways to publish multimedia screen captures and digital video on the Web create even more opportunities for sending multimedia creations to a potentially large audience. Although a student's audience may be limited to teachers and peers at the outset, that audience can quickly grow as the student shares links and ideas with other bloggers and podcasters. The awareness of even a small audience can significantly change the way a student approaches writing and other school assignments. It's the difference between handing a piece in to a teacher and publishing it.

Techno-Byte

Teachers in a 2005 survey who say

- Computer technology is an effective tool for teaching in my own content area—75.5 percent.
- Computers are effective in improving academic achievement overall—68.4 percent.
- Computers are effective in raising scores on standardized tests—58 percent.

—*eSchool News*, 2005

What the New Tools Demand of Us

These new digital tools enable everyday Internet users to digitally disseminate their ideas and experiences, a reality that has implications for teaching. Teachers must consider whether our curriculums should change now that students have the ability to reach audiences far beyond our classroom walls and to acquire their own primary sources. How should we rethink the concept of literacy now that students can instantly become not only readers and writers, but also editors and collaborators? How do we best put to use the realms of writing that this new writable Web provides?

Educators around the world are attempting to answer these tough questions. Adjusting to the Read/Write Web is not as simple as moving students from writing essays on paper to writing essays on a blog. Teachers and students must learn to navigate the complexities that accompany a publishing environment that is more transparent, interactive, and collaborative than ever before.

This explosion of online content demands a more complex definition of what it means to be literate. For more than 100 years, we have defined literacy as being able to read and write. Although those core abilities are still central to learning, however, they are no longer enough to ensure understanding and meaningful participation in the exchange of ideas online. Now that anyone with an Internet connection can publish and disseminate content with no editorial review process, consumers of Web content need to be editors as well as readers. They need to know how to identify the source of a piece of information, gauge that source's reputation, compare the information with what's already known, and make a judgment about its authenticity and relevance. We must teach students how to actively question and evaluate published information instead of passively accepting it as legitimate.

In addition, to take part in this rich digital conversation, teachers and students must become competent in Web publishing. It's no longer enough to simply consume information; we must engage with that information and share what we have learned in appropriate ways. Every person with Internet access now has a multimedia printing press at his or her disposal, an outlet with potential to do as much harm as good. Students need to understand the many ways in which they can appropriately share ideas and creations online. Teachers can facilitate this understanding by taking part in online collaborations, editing Wikipedia, and setting up blogs about their teaching practice.

To be literate in the age of the Read/Write Web means to skillfully manage the flood of information now available. Google regularly scans in information from more than 50 million books from the world's biggest research libraries, and a new blog is created every two seconds. Literate Internet users need strategies for sorting out, storing, and using relevant information from this outpouring.

Challenging Traditional Pedagogy

The Read/Write Web poses additional challenges to our thinking and methodology as educators. As more

content becomes available online, it becomes less appropriate to rely on traditional curriculum delivery methods like textbooks and handouts. More current—and in many cases, more relevant—information is as close as a Google search. Many teachers and students have already begun writing their own textbooks online, cobbling together links and annotated reading lists that future classes can build on. Much like the open source software movement, this “open content” model begs for a more collaborative assembly of course materials.

The Read/Write Web should prompt teachers to rethink their roles. With millions of knowledgeable people posting blogs, for example, students may find scientists, writers, or researchers willing to guide their study of a topic who have more content-area expertise than a classroom teacher. In such situations, the teacher's role shifts from a content expert to a guide who shows students how to find and evaluate online resources, communicate with experts whom they encounter online, and publish their own creations that result from such encounters. Classroom teachers should become content creators in their own right so that they can model appropriate use of these tools.

The tools of the Read/Write Web facilitate students' collaborative construction of meaningful knowledge. Schools have traditionally demanded that students work independently and produce content mainly for their teacher. Digital tools allow students to easily work together outside school—for example, collaborating on projects through instant messaging or text messaging on phones—and to share the results of that work with a broader audience. We should encourage such collaboration and outreach. Instead of just collecting student work to be graded and discarded at the end of the year, teachers could urge students to publish their work online so that others can learn from that work and interact with students about the ideas it contains.

The Web can also act as a student notebook or portfolio, a searchable repository capturing evidence of what a student has learned throughout his or her education. This gives students opportunities for important metacognitive reflection on their own learning.

Risks and Benefits

Obviously, the transparency created by the Read/Write Web creates risks as well as opportunities. Schools need to think through the potential privacy and safety implications that go along with widespread publishing of student-created content. How widely students should post their work online and whether they should connect their names with it depend on a range of factors—including the comfort level of adults involved, the capabilities of the software being used, and differing state and national laws.

Because much of the educational value of tools that enable students to publish their work online stems from students' potential to reach a broad audience, such decisions are crucial. Teachers employing these tools must monitor student use and teach students how to use the tools safely to enhance learning. We must also show students how to deal with inappropriate content that they may come across during their Web travels. Some schools attempt to block inappropriate Web sites from students, whereas other schools teach students how to make intelligent decisions about content that they encounter and how to react wisely if they stumble across something unsuitable.

I believe that the potential enhancements to student learning that the new Read/Write Web entails outweigh these manageable risks. The Web has become a vehicle through which students and teachers can share what they have learned in meaningful, purposeful ways. It is a place where students of disparate backgrounds can build connections and learn collaboratively with mentors and experts. And it's a place where every person with Internet access can join an ongoing global conversation.

The old read-only Web was itself a transformative technology that changed the way our students work, learn, and communicate. The new Read/Write Web will change their lives even more.

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Educator's Guide to Blogs, Wikis, Podcasts and Other Dynamic Internet Tools That Are Transforming Classrooms
(Corwin Press, March 2006).

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